INSTRUMENTS

DT-5TXR Panel Meter with Optional Output Modules

Measuring Quality



The DT-5TXR Panel Meter with Optional Output

Modules is an economical unit for speed and process time monitoring when combined with a compatible in-line sensor. Loaded with features found in more expensive units, the DT-5TXR Panel Meter is extremely versatile with selectable inputs. The DT-5TXR is fully scalable and possesses three selectable modes allowing it to measure RPM/linear speed/rate, elapsed time and process time. Each panel meter accepts a variety of signal inputs from any sensor providing an NPN, contact, sine wave, or square wave such as pulse generators, proximity sensors, photoelectric sensors, magnetic sensors and NPN OC transistors. Typical applications can range from machining operation timing, rate of change monitoring such as on a conveyor, elapsed time of oven curing etc. with any variety of compatible sensor inputs desired. The DT-5TXR panel meter also accepts various output modules, enabling it to output data for analysis, record keeping or assist in controlling the process through a separate control device. Up to two modules can be accepted simultaneously, offering an enormous number of combinations and options.

Features

- Accepts up to two output modules allowing voltage, current, BCD, NPN & relay output combinations for control or remote process monitoring
- Highly accurate (± 0.008% ± 1 digit) makes ideal for process control and analysis
- Large 6 digit LED display plus two smaller 6 digit secondary displays allow easy viewing from greater distances
- Scalable programming gives user the flexibility to set up and monitor virtually any process
- Selectable update time allows operator to speed up/slow down display changes to facilitate process
- Wide power range (85 264VAC, 50/60Hz) eliminates need for having to purchase and wire an additional power transformer. Low voltage models available
- Great versatility with multiple sensor input capability in one unit: NPN open collector, contact and square or sine wave sensor inputs
- Front cover protection eliminates accidental bumping of keypad to incorrect program
- IP66 front cover protection keeps water out, enables usage in compatible plant wash-down operations
- DC power source output to power compatible sensors saves money by eliminating need for separate power supply
- Selectable decimal point enables higher resolution display potential 1/8 DIN size panel cut out permits easy, industry-standard mounting



DT-5TXR Specifications

District Opecifications		
Measuring Range	10 - 99,999 rpm (at 1 p/r), 0.2 - 30,000 rpm (at 60 p/r)	
Display Range	Tachometer/Rate Meter: 0 - 999999 with selectable decimal point. Elapsed Time: 0:00:00 - 9:59:59 or 0.00- 999.99 sec. Process Time: 0:00:00 - 0:59:59 or 0.00 - 999.99 sec	
Scalable	Yes (with outputs, see modules)	
Accuracy	Tachometer/Rate Meter & Elapsed Time: ± 0.008 % ± 1 digit	
	Process Time: ± 0.008 % ± 1 digit	
Display Update Time	0.2, 0.5, 1, 2, 5, 10, 15, 30, 60 sec.	
Input No. of P/R	1 to 9,999 (programmable)	
Input Signal Characteristics	NPN open collector input: max. frequency 100 kHz / Contact input: max. frequency 20 Hz / Square wave input: max. frequency 30 kHz - Sine wave input (magnetic pickup): max. frequency 10 kHz	
Sensor Power Supply	12 VDC (150 mA)	
Power Requirement	85 - 264 VAC (50/60 Hz) Optional (9 - 35 VDC at 1 W also available)	
Ambient Temperature	32 - 113°F (0 - 45°C)	
Product Weight	0.66 lb (300 g)	
Package Weight	0.95 lb (430 g)	
Dimensions	5.27 x 3.78x 1.89" (134 x 96 x 48 mm)	
Warranty	1 year	
Included Accessories	Mounting adapters & screws, decal sheet	

Ordering Details

DT-5TXR	Panel Meter with Output Module Capability, Selectable inputs, 100-240 VAC Power	
DT-5TXR-DC	Panel Meter with Output Module Capability, Selectable inputs, 9-35 VDC Power	
DOP-BCD	BCD output module, 36 Pin Connection	
DOP-CPTR	Relay output module, terminal block connection	
DOP-FVC	Analog output module (4-20mA & 0-1, 0-10, 1-5 VDC), 36-pin connection	
DOP-FVTR	Analog output module (4-20mA & 0-1, 0-10, 1-5 VDC), terminal block connection	
DOP-RMTR	Ratio input module, terminal block connection	
DOP-TRC	NPN open collector output module, 36 pin connection	
DOP-TRTR	NPN open collector output module, terminal block connection	

Note: For Factory Assembled Panel Meter with Output Modules, Add Module to end of DT-5TXR Part and remove DOP. For two modules, only 1 36-Pin Module and 1 Terminal Block connection module can combine. Example: DT-5TXR-CPTR-FVC Panel Meter, 100-240VAC Power with Relay Output Terminal Module & 36-Pin Analog Output Module

DISTRIBUTED BY:

Accessories

Proximity	Accessor	100	
DJ2-G Capability, 6.5 (2 m) cable, 0.08" (2mm) sensing distance, NEMA 6 (P67) rating membranes in g distance, NEMA 6 (P67) rating membranes in g distance, NEMA 6 (P67) rating membranes (2.2 m) cable, NEMA 6 (P67) rating, for use in high vibration areas		BI2-S12	LED indication, 6.5' (2 m) cable, 0.08" (2 mm)
NEN (NO.NC) output, 300 Atz frequency, 0.32° (8 mm) sensing distance, 6.5° (2 m) cable, NEMA 6 ((P67) rating, for use in high vibration areas Se.G		DJ2-G	capability, 6.5' (2 m) cable, 0.08" (2mm) sens-
MCS-625 Indication, 18" (0.46 m) cable, 0.04" (1 mm) sensing distance,		MCS-3109	0.32" (8 mm) sensing distance, 6.5' (2 m) cable, NEMA 6 (IP67) rating, for use in high
Retro-Reflective Photo Sensors		SE-G	indication, 18" (0.46 m) cable, 0.04" (1 mm)
Reflective Photo Sensors Hz activating frequency, LED status, 10' (3 m) cable, NEMA 4 (IP65), 1" to 3' (25 to 914 mm) operating range for light or dark activation.		MCS-625	activating frequency, 10' (3 m) cable 1" to 3'
Laser sensor with NPN/PNP (NC)NC) outputs, 1.5 kHz frequency, LED indication, 6' (1.8 m) with quick disconnect connection, NEMA 6 (IP67) rating	Reflective Photo	MCS-655	Hz activating frequency, LED status, 10' (3 m) cable, NEMA 4 (IP65), 1" to 3' (25 to 914 mm)
RE1B-60C RE1B-60C RE1B-60C RE1B-60OC RE1B-100OC RE1B-100OC RE1B-10OOC RE2B-3OC R		LS-S50MLR	1.5 kHz frequency, LED indication, 6' (1.8 m) with quick disconnect connection, NEMA 6
RE1B-600C RE1B-1000C RE1B-1000C RE1B-1000C RE1B-1000C RE1B-1000C RE1B-1000C RE1B-1000C RE2B-30C R		RE1B-60C	age minus 2.5V or more, 10mA (max) / Logic "0" less the 0.4V, 30mA max.), 60 pulses/
Retary Pulse Generators RE2B-30C R		RE1B-600C	age minus 2.5V or more, 10mA (max) / Logic "0" less the 0.4V, 30mA max.), 600 pulses/
Rezb-30C Rezb-30C quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 30 pulses/rev., 5000 rpm max., 1.6' (.49 m) cable.		RE1B-1000C	age minus 2.5V or more, 10mA (max) / Logic "0" less the 0.4V, 30mA max.), 1000 pulses/
RE2B-60C RE2B-60C RE1B Series. A zero position output for shaft position reference. 60 pulses/rev., 5000 rpm max., 1.6' (.49 m) cable. Dual logic output (90° out of phase) for quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 600 pulses/rev., 3000 rpm max., 1.6' (.49 m) cable. FPM-RE1B 12" circumference wheel for use with RE1B and RE2B pulse generators Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m) cable Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, Amphenol connector CABLE-3030 Optional cable for 3030AN Sine wave output from change in magnetic to	Pulse	RE2B-30C	quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 30 pulses/rev., 5000 rpm
RE2B-600C quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 600 pulses/rev., 3000 rpm max., 1.6' (.49 m) cable.		RE2B-60C	quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 60 pulses/rev., 5000 rpm
MP-10 MP-10 MP-10 Magentic Pick-up Sensors CABLE-3030 MP-10 Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m) cable Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, Amphenol connector CABLE-3030 Optional cable for 3030AN Sine wave output from change in magnetic to		RE2B-600C	quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 600 pulses/rev., 3000 rpm
MP-10 non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m) cable Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, Amphenol connector CABLE-3030 Optional cable for 3030AN Sine wave output from change in magnetic to		FPM-RE1B	
Magentic Pick-up Sensors 3030AN non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, Amphenol connector CABLE-3030 Optional cable for 3030AN Sine wave output from change in magnetic to	Pick-up	MP-10	non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m)
Sine wave output from change in magnetic to		3030AN	non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, Amphenol
		CABLE-3030	Optional cable for 3030AN
3070- XP12010 XP12010 To magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10" (3 m) cable Stainless steel housing, explosion-proof ATEX approved: II 2 GEExm II T3			non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m) cable Stainless steel housing, explosion-proof
Slot Type Sensor CM-SR21 CM-SR21 For less dense materials that allows beam to penetrate through, NPN or PNP output with a 0.08" (2 mm) gap range, NEMA 4x (IP65) housing.		CM-SR21	to penetrate through, NPN or PNP output with a 0.08" (2 mm) gap range, NEMA 4x
CPL 75ANI Optional cable for CM CP01 16 41 (5 m)		CBL-75ANL	Optional cable for CM-SR21 16.4' (5 m)